10.0 ABBREVIATION/ACRONYM LIST

AAALAC Association for Assessment and Accreditation of

Laboratory Animal Care

AAB Ammunition Accountability Branch

ABSL animal biosafety level AFI Air Force Instruction

AFOSH Air Force Occupational and Environmental Safety, Fire

Prevention, and Health

AFOSHSTD Air Force Occupational Safety and Health Standard

AMC Army Materiel Command AMSL above mean sea level APG Aberdeen Proving Ground

APGR APG Regulation

AQCR Air Quality Control Region

AR Army Regulation

ARC Animal Resources Center

ARMA Air and Radiation Management Administration

AVC agent vapor challenge

AVCC agent vapor challenge concentration

BAIRA Biological Accident or Incident Response and Assistance

BD biological defense

BDRDAP Biological Defense Research, Development, and Acquisition Program

BDRP Biological Defense Research Program
BGEC Baltimore Gas and Electric Company

BLM Bureau of Land Management
BMI Battelle Memorial Institute
BMTF Bushnell Materiel Test Facility
BOD biological oxygen demand
BSC biological safety cabinet

BSL biosafety level Btu British thermal unit

BWC Biological Weapons Convention

BWI Baltimore-Washington International Airport

BWR biological warfare research

°C degrees Celsius CAA Clean Air Act

CAIRA Chemical Accident or Incident Response and Assistance

CAW chemical agent-related waste
CB chemical and biological
CBCA Chesapeake Bay Critical Area

CBDP Chemical and Biological Defense Program

CBL Chemical and Biological Defensive Warfare Laboratory

CBR chemical, biological, and radiological CBW chemical and biological warfare

ccf 100 cubic feet

CCTF Combined Chemical Test Facility

CD chemical defense

CDC Centers for Disease Control and Prevention

CDP Census Designated Place

CEQ Council on Environmental Quality

CFC chlorofluorocarbons

CFR Code of Federal Regulations
CHO Chemical Hygiene Office
CHP chemical hygiene plan

CHS controlled hazardous substance

CHWSF Central Hazardous Waste Storage Facility

CO carbon monoxide CO₂ carbon dioxide

COD chemical oxygen demand
COMAR Code of Maryland Regulations
CSM chemical surety materiel
CSSS central sanitary sewer system
CTF Chemical Transfer Facility

CWA Clean Water Act

CWC Chemical Weapons Convention CZMA Coastal Zone Management Act

DA Department of the Army

DARPA Defense Advanced Research Projects Agency
DATSD(CBD) Deputy Assistant to the Secretary of Defense for

Chemical and Biological Defense

DCA Reagan National Airport

DCR-NH Department of Conservation and Recreation,

Division of Natural Heritage dichloro-diphenyl-trichloroethane Department of Environmental Quality Directorate of Installation Services

DoD Department of Defense

DDT DEQ

DIS

DoDD Department of Defense Directive
DoDI Department of Defense Instruction
DOT Department of Transportation
DPG Dugway Proving Ground

DPG Dugway Proving Ground
DPGR Dugway Proving Ground Regulation

Digway Hoving Ground Regulati

DPW Directorate of Public Works

DRMS Defense Reutilization Marketing Services
DSHE Directorate of Safety, Health, and Environment

EA environmental assessment

ECBC Edgewood Chemical Biological Center
ECD Environmental Compliance Division
ECI Environmental Compliance Inspection
ECO Environmental Compliance Officer

ECR entry control roster

ECRD Environmental Conservation and Restoration Division

EEB Environmental Engineering Branch
EIS environmental impact statement
EPA Environmental Protection Agency

EPCRA Emergency Planning and Community Right-to-Know Act

EQO Environmental Quality Office

ERDEC Edgewood Research, Development, and Engineering Center

ERP Employee Reliability Program

ESHO Environmental Safety and Health Officer
ESOH Environment, Safety, and Occupational Health

°F degrees Fahrenheit

FDA Food and Drug Administration FDFD Fort Detrick Fire Department

FOAM Facilities Operations and Management

FPEIS final programmatic environmental impact statement

FSP Facility Safety Plan

FSSP Facility Safety and Security Plan
GEM genetically engineered microorganism
HAGLO hourly average ground-level ozone

HAP hazardous air pollutant HAZMAT hazardous material

HEPA high-efficiency particulate air

HID human infective dose HOU William P. Hobby Airport

HPAC Hazard Prediction and Assessment Capability HQDA Headquarters, Department of the Army

HRLD human respiratory lethal dose
HSS Health and Safety Services
HWM Hazardous Waste Management

IACUC Institutional Animal Care and Use Committee

IAD Dulles International Airport

ID infective dose

IND Investigational New Drug

INRMP Integrated Natural Resource Management Plan

IOP Internal Operating Procedure IPT Integrated Product Team

IRP Installation Restoration Program

JPO BD Joint Program Office for Biological Defense

JVAP Joint Vaccine Acquisition Program KUSAHC Kirk U.S. Army Health Clinic

kWh kilowatt-hour

LACUC Laboratory Animal Care and Use Committee

LAI laboratory-acquired illness
LARF Large-Animal Research Facility

LD lethal dose

LSTF Life Sciences Test Facility

m² square meters m³ cubic meters

m³/min cubic meters per minute
MAAF Michael Army Airfield
MACOM Major Army Command
MARC Maryland Rail Commuter

MARCORSYSCOM Marine Corps Systems Command

MCE maximum credible event MCL maximum contaminant level

MDE Maryland Department of the Environment

MEDCOM Medical Command

mg/m³ milligrams per cubic meter

mg/min-m² milligrams per minute per square meter MIPLD mouse intraperitoneal median lethal dose

mL milliliters

MLTS One-Million-Liter Test Sphere

MREF Medical Research and Evaluation Facility

MRVS medical research volunteer subject

MSDS material safety data sheet

MUO Maintenance and Utilities Office MVCA most volatile chemical agent

mWh megawatt-hour

NAAQS National Ambient Air Quality Standards

NBC nuclear, biological, and chemical NEPA National Environmental Policy Act

NHP nonhuman primate

NIH National Institutes of Health

NO_x nitrogen oxides NOU Notification of Use

NPDES National Pollutant Discharge Elimination System

NPL National Priority List

NRC Nuclear Regulatory Commission
NRHP National Register of Historic Places

NSWCDL Naval Surface Warfare Center Dahlgren Laboratory

NWR National Wildlife Refuge

 O_3 ozone

O&M operations and maintenance OAC Ohio Administrative Code

OMD Operations and Maintenance Division

OMWM Operations, Maintenance, and Waste Management

OPNAVINST Chief of Naval Operations Instruction

ORC Ohio Revised Code

OSC Operations Support Command

OSHA Occupational Safety and Health Administration
OSHP Occupational Safety and Health Program

P2 Pollution Prevention

PAA Phillips Army Airfield

PAH polynuclear aromatic hydrocarbon

PAM DA Pamphlet

PCB polychlorinated biphenyl PEF process Engineering Facility

PEIS programmatic environmental impact statement

PEO CBD Program Executive Office for Chemical and Biological Defense PESHE Programmatic Environmental, Safety, and Occupational Health

Evaluation

PFA paraformaldehyde PFU plaque-forming unit

PHL Philadelphia International Airport

PI principal investigator PM particulate matter

POTW publicly owned treatment works

ppb parts per billion

PPE personal protection equipment

ppm parts per million

PRP Personnel Reliability Program

PTO Permit to Operate
RAA restricted-access area

RAB Restoration Advisory Board risk-based threshold concentration

RCRA Resource Conservation and Recovery Act RDA research, development, and acquisition

rDNA recombinant DNA

RDT&E Research, Development, Test, and Evaluation

RI remedial investigation

RIC Richmond International Airport

RMP risk management plan
RRO Risk Reduction Office
RSC Radiation Safety Committee
RSO Radiation Safety Officer
SAP satellite accumulation point
SAS satellite accumulation site

SBCCOM Soldier and Biological Chemical Command SCOB Safety and Chemical Operations Branch

SECNAVINST Secretary of the Navy Instruction

SIA Special Interest Area

SIP Special Immunizations Program
SLC Salt Lake City International Airport

SMW special medical waste

SO₂ sulfur dioxide

SOP standard operating procedure

SR State Route

SRPO Safety and Radiation Protection Office

0201002

SSP Steam Sterilization Plant

SWPPP Storm Water Pollution Prevention Plan

TAC Texas Administrative Code

TAP toxic air pollutant TCE trichloroethylene

TCLP Toxicity Characteristic Leaching Procedure

TEP triethylphosphate

TGLO Texas General Land Office

TNRCC Texas Natural Resources Conservation Commission

TPW State of Texas Parks and Wildlife TSDF treatment, storage, and disposal facility

TSS total suspended solids

UDEQ Utah Department of Environmental Quality

UDWQ Utah Division of Water Quality

USACEHR U.S. Army Center for Environmental Health Research

USACOE U.S. Army Corps of Engineers

USAG U.S. Army Garrison

USAMRDC U.S. Army Medical Research and Development Command USAMRICD U.S. Army Medical Research Institute of Chemical Defense USAMRIID U.S. Army Medical Research Institute of Infectious Diseases

USAMRMC U.S. Army Medical Research and Materiel Command

USC United States Code

USDA U.S. Department of Agriculture USFWS U.S. Fish and Wildlife Service

USR U.S. Route

UTMB University of Texas Medical Branch

UXO unexploded ordnance

VEE Venezuelan equine encephalitis

VMLRD Veterinary Medicine and Laboratory Resources Division

VMD Veterinary Medicine Division VOC volatile organic compound

VPDES Virginia Pollutant Discharge Elimination System

WAH Weide Army Helipad
WDTC West Desert Test Center
WEP Waste-to-Energy Plant
WTP water treatment plant
WWTP wastewater treatment plant

WWI World War I WWII World War II

10.1 Metric Conversion Chart

To Convert Into Metric			To Convert From Metric		
If You Know	Multiply By	To Get	If You Know	Multiply By	To Get
Length					
inches	2.54	centimeters	centimeters	0.3937	inches
feet	30.48	centimeters	centimeters	0.0328	feet
feet	0.3048	meters	meters	3.281	feet
yards	0.9144	meters	meters	1.0936	yards
miles	1.60934	kilometers	kilometers	0.6214	miles
Area					
square inches	6.4516	square centimeters	square centimeters	0.155	square inches
square feet	0.092903	square meters	square meters	10.7639	square feet
square yards	0.8361	square meters	square meters	1.196	square yards
acres	0.40469	hectares	hectares	2.471	acres
square miles	2.58999	square kilometers	square kilometers	0.3861	square miles
Volume					
fluid ounces	29.574	milliliters	milliliters	0.0338	fluid ounces
gallons	3.7854	liters	liters	0.26417	gallons
cubic feet	0.028317	cubic meters	cubic meters	35.315	cubic feet
cubic yards	0.76455	cubic meters	cubic meters	1.308	cubic yards
Weight					
ounces	28.3495	grams	grams	0.03527	ounces
pounds	0.4536	kilograms	kilograms	2.2046	pounds
short tons	0.90718	metric tons	metric tons	1.1023	short tons
Temperature					
Fahrenheit	Fahrenheit Subtract 32, then Celsius multiply by 0.55556		Celsius	Multiply by 1.8, then add 32	Fahrenheit

Metric Prefixes

Prefix	Symbol	Multiplication Factor
exa-	Е	$1\ 000\ 000\ 000\ 000\ 000\ 000 = 10^{18}$
peta-	P	$1\ 000\ 000\ 000\ 000\ 000 = 10^{15}$
tera-	T	$1\ 000\ 000\ 000\ 000 = 10^{12}$
giga-	G	$1\ 000\ 000\ 000 = 10^9$
mega-	M	$1\ 000\ 000 = 10^6$
kilo-	k	$1\ 000 = 10^3$
hecto-	h	$100 = 10^2$
deka-	da	$10 = 10^1$
deci-	d	$0.1 = 10^{-1}$
centi-	С	$0.01 = 10^{-2}$
milli-	m	$0.001 = 10^{-3}$
micro-	μ	$0.000\ 001 = 10^{-6}$
nano-	n	$0.000\ 000\ 001 = 10^{-9}$
pico-	p	$0.000\ 000\ 000\ 001 = 10^{-12}$
femto-	f	$0.000\ 000\ 000\ 000\ 001 = 10^{-15}$
atto-	a	$0.000\ 000\ 000\ 000\ 001 = 10^{-18}$